LETTER TO THE EDITOR

Erythema multiforme after SARS-CoV-2 vaccine

Dear Editor,

A 46-year-female presented with a 1-week history of multiple erythema and blisters with pruritus on the extremities. She had received both doses of the SARS-CoV-2 vaccine (Corona Vac developed by Sinovac Life Sciences, Beijing, China), which is an inactivated vaccine. She had no adverse reactions after the first dose. The cutaneous lesions started 4 days after the second dose. She denied systemic diseases, medication history and medicine or food allergic history. Physical examination showed multiple circular erythema and blisters with classic target lesions on the distal extremities (Fig. 1). Multiple erosions involved her lip and oral mucosa (Fig. 2). Laboratory tests including blood routine, hepatic and renal function, T. pallidum particle assay, and HIV antibody serology test were normal or negative. The patient was diagnosed with erythema multiforme (EM) and treated with oral loratadine, rinsing with compound chlorhexidine gargle, and topical corticosteroids. The lesions and symptoms were completely relieved after 2 weeks.

Erythema multiforme is an acute self-limited immune-mediated mucocutaneous disorder, and occasionally occurs with visceral involvement in severe patients. The lesions are distributed preferentially on the distal extremities with classic target lesions and may accompany a mucosal injury. Potential triggering factors of EM include infections (especially herpes simplex virus



Figure 1 Multiple circular erythema and blisters with classic target lesions on the hands.



Figure 2 Erosions on the lip and oral mucosa.

infections), drugs (containing vaccine), topical agents, and some systemic diseases.

With the worldwide vaccination campaign against the COVID-19 pandemic continuing, increasing cutaneous reactions after the SARS-CoV-2 vaccine have been reported. The most common reported cutaneous reactions included urticaria, local injection-site reaction and morbilliform rash. Other cutaneous reactions included delayed large local reaction, swelling, erythema, painful/itchy sensation, erythromelalgia, a flare of an existing dermatologic condition, vesicular, chilblains, zoster, angioedema, pityriasis rosea, filler reaction, vasculitis, contact dermatitis, rash in a breastfed infant, petechiae, lichen planus and EM. These reported cutaneous reactions were mainly associated with mRNA SARS-CoV-2 vaccine. There are few cutaneous reactions reported about inactivated SARS-CoV-2 vaccine in the literature.

In conclusion, cutaneous adverse reactions from the SARS-CoV-2 vaccine were very rare, mild and generally rapid spontaneous resolution. We should advance notice and reassure the vaccinator. Nevertheless, these adverse events and others should not discourage vaccination against a life-threatening virus.

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